



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX

75 Hawthorne Street  
San Francisco, CA 94105

June 24, 2005

Gene K. Fong, Division Administrator  
Federal Highway Administration, California Division  
650 Capitol Mall, Suite 4-100  
Sacramento, CA 95814

Subject: Draft Environmental Impact Statement/Environmental Impact Report for the  
Campus Parkway, Merced County, California (CEQ #20050175)

Dear Mr. Fong:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act. Our detailed comments are enclosed.

The Draft Environmental Impact Statement (DEIS) for this proposed project appropriately acknowledges the need to demonstrate the independent utility of this project from the proposed full buildout of the U.C. Merced Campus and Community Plan. We commend the Federal Highway Administration for preparing a Traffic Analysis-Addendum (2004) that considers the independent utility of the proposed project. The Traffic Analysis-Addendum presents projected traffic growth in the study area without the full build-out of the U.C. Merced Campus and Community Plan, but including the U.C. Merced Campus Phase 1. EPA is concerned, however, that the DEIS does not clearly present the traffic benefits of the proposed Campus Parkway under the U.C. Merced Campus Phase 1 scenario.

Through our review of the DEIS, EPA has identified specific concerns that include: (1) Traffic Analysis; 2) Range of Alternatives; 3) Connected Actions; 4) Logical Termini; 5) Air Quality; 6) Cumulative Impacts; and 7) Induced Growth.

For these reasons, we have rated the build alternatives as Environmental Concerns-Insufficient Information (EC-2). Please see the enclosed Summary of EPA Rating Definitions.

We appreciate the opportunity to review this DEIS. When the Final EIS is released for public review, please send two copies to the address above (mail code: CED-2). If you have any questions, please contact me or Nancy Levin, the lead reviewer for this project. Nancy can be reached at 415-972-3848 or [levin.nancy@epa.gov](mailto:levin.nancy@epa.gov).

Sincerely,

/S/  
Laura Fujii, Acting Manager  
Environmental Review Office

Enclosures:  
Summary of EPA Rating Definitions  
EPA's Detailed Comments

cc:  
Mahfoud Licha, Caltrans District  
Steve Rough, Merced County Department of Public Works  
Nancy Haley, U.S. Army Corps of Engineers  
Mark Littlefield, U.S. Fish and Wildlife Service

### Traffic Analysis

The Draft Environmental Impact Statement (DEIS) states that the proposed Campus Parkway project is needed to increase capacity and connectivity to State Route (SR) 99 in response to projected growth in the City and County of Merced and the approved Phase 1 of the University of California, Merced Campus ("UC Phase 1"). It states that the project has "independent utility," in that the need for the project exists even without further expansion of the U.C. Merced Campus and Community Plan ("UC Buildout"). The 2004 Traffic Analysis Addendum (2004 Addendum) presents modeled results for alternatives under the U.C. Phase 1 scenario. We commend Federal Highway Administration (FHWA) for having recognized the need to clearly demonstrate the independent utility of this project under the UC Phase 1 scenario.

The DEIS states that the proposed project would provide traffic benefits at selected roadway segments under the UC Phase 1 scenario (p. 3-217), even if the full buildout of the U.C. Merced Campus and Community Project did not take place as indicated in Figure 1-3. However, the magnitude of project benefits under the UC Phase 1 scenario is not clear. It appears that many of the main roadways in downtown Merced will still experience heavy congestion (Level of Service D to F) even if the proposed Parkway is built. The road segments for which the Level of Service (LOS) is expected to deteriorate (Table 1-2) will remain congested even if the proposed Parkway is built. Feeder roadways such as Yosemite and Olive will experience increased congestion, with LOS D to F conditions on road segments near the Parkway. Finally, even without the proposed project, the main roadways east of the proposed Parkway location would operate at LOS C or better in 2025. (2004 Addendum, Appendix B).

#### Recommendation:

The FEIS should clearly demonstrate the traffic benefits of the proposed Campus Parkway under the U.C. Phase 1 growth scenario.

### Range of Alternatives

The DEIS describes the "Western Beltway Alignment" in Section 2.5: "Alternatives Considered But Withdrawn From Further Evaluation." We understand that Turlock and Modesto, northwest of Merced, will be the major commute destinations on SR 99 for anticipated new residential growth north and northeast of downtown Merced. It appears a western beltway would serve the anticipated increased development north of Merced with less out of direction traffic than the proposed project. The DEIS states that the Western Beltway Alignment, which is now programmed as a separate project (Highway 59 Expressway project), was eliminated from consideration for this project because it does not serve the southeastern portion of Merced between SR 99 and SR 140. However, it appears that in the 2025 Base Case (No Build), the southeastern portion of Merced (east of Coffee Street) would experience Level of Service (LOS)

C. The DEIS should evaluate the importance of anticipated travel volumes from this southeastern area.

Recommendation:

Clearly describe why the Campus Parkway was determined to most effectively meet the projected traffic demand as compared to a western beltway alignment.

Connected Actions

The proposed project would increase congestion on feeder roads. In the 2025 U.C. Phase 1 growth scenario, the LOS would fall to “F” on portions of Yosemite Avenue and “D” on Olive Avenue that feed into the Campus Parkway (Addendum, 2004). In addition, even with the Campus Parkway, downtown Merced would experience severe congestion, with many roadways operating at LOS F. Based on the information provided, LOS C is the long-term desired goal and LOS D is the acceptable threshold for congestion in the City of Merced.

Recommendations:

Explain whether additional improvements to feeder roads will be necessary to accommodate the increased congestion as a result of the Campus Parkway. If these improvements are needed, they are considered “connected actions” under the Council of Environmental Quality’s regulations implementing the National Environmental Policy Act (40 CFR Part 1508.25(a)(1)). The environmental impacts of connected actions, such as required improvements to Yosemite and Olive Avenues, should be included in the Final EIS (FEIS) for this project.

Discuss the transportation improvements that will be made to alleviate congestion in downtown Merced, including transit and Transportation System Management measures being considered or planned.

Logical Termini

There are several potential northern termini for the proposed project. The Green Alignment and Alternate terminate at Yosemite Avenue, proximate to Lake Road. The Yellow Alignment terminates at Yosemite Avenue approximately 0.5 miles east of Lake Road. The long-term plan for the U.C. Merced Campus and Community Plan includes a possible extension of the Campus Parkway from Yosemite to Bellevue. Based on previous studies, it is likely that this northern extension of the Parkway would require a Section 404 individual permit and be subject to EPA’s Clean Water Act (CWA) Section 404(b)(1) Guidelines. The northern termini of the preferred alternative should not preclude selection of the “least environmentally damaging practicable alternative” (LEDPA) for a future Campus Parkway extension.

## Recommendations:

Describe why the different termini were selected for the build alternatives.

Demonstrate that the northern termini of the preferred alternative for the proposed project does not preclude the selection of the LEDPA for a future extension of the Campus Parkway north of Yosemite Avenue.

## Air Quality

The project is located in the San Joaquin Valley Air Basin, which is designated non-attainment under the Clean Air Act for particulate matter less than 10 microns in diameter (PM 10), PM 2.5, and Ozone. The DEIS does not reflect the San Joaquin Valley Air Basin's recently designated non-attainment status for PM 2.5. The area designations for 8-hour Ozone have also become effective. The FEIS should describe these changes and include PM 2.5 in the "Criteria Pollutants" section (p. 3-48). The DEIS states the proposed project is part of a conforming Regional Transportation Plan (RTP), but does not provide documentation. Documentation should be provided in the FEIS.

This project may have air quality impacts during construction from diesel equipment and earth movement. We commend FHWA for including a discussion of potential construction-related emissions, including fugitive dust, diesel toxics, Nitrogen Oxides, PM 10 and PM 2.5. However, while the DEIS lists several available mitigation measures, such as imposing construction contract requirements on the use of catalytic converters, idling limits, equipment maintenance, and the use of non-diesel powered equipment, FHWA does not commit to their use. Given the well-known and adverse health effects for PM 2.5 and diesel exhaust exposure, EPA urges project proponents to reduce diesel construction emissions and other construction-related air quality impacts to the greatest extent possible. The FEIS should include a fugitive dust control plan.

The proposed project footprint SR 99 and SR 140 is located near schools, parks, and low income areas. Given the extensive scientific literature on near-roadway health effects, the FEIS should qualitatively discuss the potential for localized health concerns that may result from a shifting of traffic to roadways in close proximity (less than 200 meters) to residences, businesses, and sensitive receptors. Air emissions from mobile sources can include a large number of potentially toxic constituents, described by EPA's Office of Transportation and Air Quality web site (<http://www.epa.gov/otaq/toxics.htm>) And the Environmental Fact Sheet entitled "Air Toxics from Motor Vehicles" (<http://www.epa.gov/otaq/f020004.pdf>).

## Recommendations:

Update the Air Quality section regarding the status of area designations for Ozone and PM 2.5. Provide documentation that the project meets the requirements of transportation conformity under the Clean Air Act. Disclose projected exceedences of federal air quality

standards, even if temporary; and specify the duration and concentration of air emissions by pollutant and location for each phase of project construction.

Identify sensitive receptors in the project area, such as children, elderly, infirm, and athletes, and minimize impacts to these populations. Discuss the potential health impacts that can result from increased exposure to mobile source pollutants in the vicinity of high traffic roadways.

Include a commitment to implement mitigation measures to minimize diesel emissions for each phase of project construction. For example, require contractors to keep the equipment fine-tuned or use alternative fueled vehicles. Include a fugitive dust control plan.

### Cumulative Impacts

The Cumulative Impacts section (3.7.5) acknowledges waters of the U.S., including wetlands, have been adversely impacted in the Central San Joaquin Valley and Merced County. It appropriately recognizes the potential adverse impacts to aquatic resources from the proposed U.C. Merced Campus and University Community projects. However, the section does not include data that is fundamental to a cumulative impacts analysis. For example, the cumulative impacts study area for aquatic resources is not defined. Table 3.7-5 provides quantitative information on the anticipated direct impacts from the U.C. Merced Campus, University Community, Mission Avenue/SR99 Interchange and the Campus Parkway. It does not, however, provide information on potential indirect impacts. Furthermore, the DEIS does not include reasonably foreseeable actions in the cumulative impacts analysis. The DEIS states that if all current adopted and proposed developments were included, the total acreage of impacts would be higher (p.3-106). The cumulative impacts analysis does not include the cumulative impacts to aquatic resources of these adopted and proposed developments.

#### Recommendations:

Specify the cumulative impacts study area for the waters of the U.S., including wetlands. Provide a quantitative estimate of direct and indirect impacts to aquatic resources as a result of the current and reasonably foreseeable actions in the cumulative impacts resource study area.

Discuss potential mitigation opportunities for cumulative impacts, whether or not they are within the authority of the transportation agencies.

### Induced Growth

The DEIS acknowledges that the proposed project could increase pressures to convert land from agricultural use to urban uses. It states that land adjacent to the proposed Campus Parkway would be subject to development as a result of the project and the direct access provided

from SR 99 into the study area. However, it does not discuss the potential environmental impacts as a result of the potential land use change induced by the proposed project.

Recommendation:

Provide detailed information on the potential environmental impacts of land use change that may occur as a result of the proposed Campus Parkway.

Waters of the U.S., including Wetlands

The DEIS provides Table 3.7-2 Summary of Wetland Functions and Values, but does not describe how this information is evaluated in the DEIS, or whether it will be used to determine compensatory mitigation for unavoidable impacts. The DEIS does not provide quantitative data differentiating between the high, medium, and low criteria for functions and values. Wetland conditions should be determined using the functions and values criteria appropriate for the specific class of wetlands being considered.

Recommendation:

Modify Table 3.7-2 Summary of Wetland Functions and Values, as discussed above, or delete it from the FEIS.

Roadway Design: Roundabouts

The DEIS states that the proposed Campus Parkway may include roundabouts, rather than intersections, at Olive and Yosemite Avenue in order to reduce delays and increase safety. EPA recognizes that the use of roundabouts can have congestion and safety benefits over intersections and supports FHWA's consideration of their use.

Recommendation:

EPA strongly recommends that the project proponent consider the use of roundabouts, given their potential for traffic, safety, and air quality benefits.